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IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF OREGON  
PORTLAND DIVISION

**FLIR SYSTEMS, INC.**, an Oregon corporation,

Plaintiff,

v.

**THOMAS L. GAMBARO**, an individual;  
and **MOTIONLESS KEYBOARD COMPANY**, an Oregon corporation

Defendants.

Case No. CV 10-0231-BR

**DEFENDANT AMENDED ANSWERS AND COUNTERCLAIMS**

**DEMAND FOR JURY TRIAL**

**DEFENDANT AMENDED ANSWERS AND COUNTERCLAIMS**

In the Defendant THOMAS L. GAMBARO, an individual and MOTIONLESS KEYBOARD COMPANY, an Oregon corporation soon to be excluded from this case, herein reply to the Plaintiffs First Set of Interrogatories in a timely manner according to established statutes cited: The responses to the PLAINTIFFS' FIRST SET OF INTERROGATORIES TO DEFENDANTS are consistent with the previous filings responding to PLAINTIFFS' FIRST REQUEST FOR PRODUCTION OF

**DEFENDANT AMENDED ANSWERS AND COUNTERCLAIMS**

**Pg 1 of 7**

DOCUMENTS TO DEFENDANTS that was filed timely by Defendants under the title DEFENDANTS RESPONSE TO REQUESTS FOR PRODUCTION that included PATENT ENFORCEMENT COMPANY EXHIBIT 06 and PATENT ENFORCEMENT COMPANY EXHIBIT 07 also previously filed supporting the Plaintiffs requests for the production of documents and the Defendants response to PLAINTIFFS' FIRST SET OF INTERROGATORIES TO DEFENDANTS also rely on and are supported by PATENT ENFORCEMENT COMPANY EXHIBIT 06 and PATENT ENFORCEMENT COMPANY EXHIBIT 07.

THOMAS L. GAMBARO answers INTERROGATORY NO. 1 and NO. 2 as the inventor answering for U.S. Patent No. 5,332,322, PATENT ENFORCEMENT COMPANY, and MOTIONLESS KEYBOARD COMPANY. Defendant answers to INTERROGATORY NO. 3 to NO. 19 are that on information and belief without access to records that are lost as previously disclosed, the Defendants are unable to provide a complete and accurate response to the additional Plaintiff interrogatories.

**THOMAS L. GAMBARO COUNTERCLAIMS**  
**U.S. Patent No. 5,332,322 and U.S. Patent Design 405,071**

A. U.S. Patent Number 5,332,322 titled "ERGONOMIC THUMB-ACTUABLE KEYBOARD FOR A HAND GRIPPABLE DEVICE", Claim One through Claim Three, and Claim Five are infringed by FLIR Systems Inc. with nine FLIR Accused Devices that include the FLIR i5 Thermal Imaging Camera, FLIR i7 Thermal Imaging Camera, FLIR b-40 Thermal Imaging Camera, FLIR b-50 Thermal Imaging Camera, FLIR b-60 Thermal Imaging Camera, FLIR i-40 Thermal Imaging Camera, FLIR i-50 Thermal Imaging Camera, FLIR i-60 Thermal Imaging Camera and FLIR infra CAM SD.

B. Each of the FLIR Accused Devices that are the i5, i7, b-40, b-50, b-60, i-40, i-50, I-60, and infra CAM SD also contains each and every element of U.S. Patent Number 5,332,322 Claim 1-3 & 5 and the CLAIM of U.S. Patent Design 405,071.

C. Each of the FLIR Accused Devices that are the i5, i7, b-40, b-50, b-60, i-40, i-50, I-60, and infra CAM SD also contains the equivalent of each and every element of U.S. Patent Number 5,332,322 Claim 1-3 & 5 and the CLAIM of U.S. Patent Design 405,071.

D. Each FLIR \_\_\_\_ Accused Device below are to be individually examined (i5, then i7 et al.) in turn for each of the following elements for each Accused Device individually:

1. The FLIR \_\_\_\_ Accused Device is a hand-held device?
2. The FLIR \_\_\_\_ Accused Device contains an electronic system?
3. The FLIR \_\_\_\_ Accused Device contains a keyboard?
4. The FLIR \_\_\_\_ Accused Device has a keyboard capable of entering information?
5. The FLIR \_\_\_\_ Accused Device has an electronic system controlled by a keyboard?
6. The FLIR \_\_\_\_ Accused Device is a hand-held device with a housing?
7. The FLIR \_\_\_\_ Accused Device has a housing with a grippable portion?
8. The FLIR \_\_\_\_ Accused Device is a device that can be held in one hand?
9. The FLIR \_\_\_\_ Accused Device is a device held in one hand with the thumb free?
10. The FLIR \_\_\_\_ Accused Device lets the thumb move to predetermined positions?

11. The FLIR \_\_ Accused Device has a housing that contains a concavity?
12. The FLIR \_\_ Accused Device has a housing that contains a concave area?
13. The FLIR \_\_ Accused Device has a concavity at the key-actuation positions?
14. The FLIR \_\_ Accused Device has a thumb-associable cluster of keys?
15. The FLIR \_\_ Accused Device has three or more keys forming a keyboard?
16. The FLIR \_\_ Accused Device has a keyboard in a concavity?
17. The FLIR \_\_ Accused Device has a plurality of keys in a cluster of at least three?
18. The FLIR \_\_ Accused Device allows the thumb to selectively actuate keys?
19. The FLIR \_\_ Accused Device allows the thumb to make endo movements?
20. The FLIR \_\_ Accused Device allows the thumb to move lateral and endo?
21. The FLIR \_\_ Accused Device allows the thumb to move inside a concavity?
22. The FLIR \_\_ Accused Device lets the thumb move inside concave areas?
23. The FLIR \_\_ Accused Device allows keys to activate to enter information?
24. The FLIR \_\_ Accused Device allows information to enter an electronic system?
25. FLIR Systems Incorporated is infringing U.S. Patent 5,332,322 and U.S. Patent Design 405,-071 for each and every accused devices specified above.

**DAMAGES TO BE DETERMINED BY JURY**

B. The Court enter judgment against the Plaintiff on patent infringements of each and every FLIR Accused Device for infringement of the '322 Patent and '071 Patent including attorney fees and costs.

**PRAYER FOR RELIEF**

C. The Court enter judgment against Plaintiff on and dismiss with prejudice, each claim of the COMPLAINT FOR DECLARATORY JUDGMENT OF NON-INFRINGEMENT AND INVALIDITY OF PATENT in favor of the Defendant.

**DECLARATORY JUDGMENTS FOR INFRINGEMENT DAMAGES**

A. Damages for infringement of U.S. Patent Number 5,332,322 titled "ERGONOMIC THUMB-ACTUABLE KEYBOARD FOR A HAND GRIPPABLE DEVICE" and U.S. Patent Design 405,071 titled "CURSOR CONTROL-DATA ENTRY DEVICE" as illustrated with additional evidence that includes U.S. Patent Design 405,071 patent issued February 2, 1999 and '322 Claim Chart examining '071 embodiments based on the sales of FLIR Accused Devices that are disclosed during discovery for the i5, i7, b-40, b-50, b-60, i-40, i-50, I-60, and infra CAM SD contain each and every element of U.S. Patent Number 5,332,322 Claim One through Claim Three and Claim Five and the CLAIM of U.S. Patent Design 405,071 either literally or the equivalent of all specified claims that includes the life of both patents combined that include the continuous term of July 26, 1994 to February 2, 2013. These are illustrated in COUNTERCLAIM EXHIBIT A and COUNTERCLAIM EXHIBIT B.

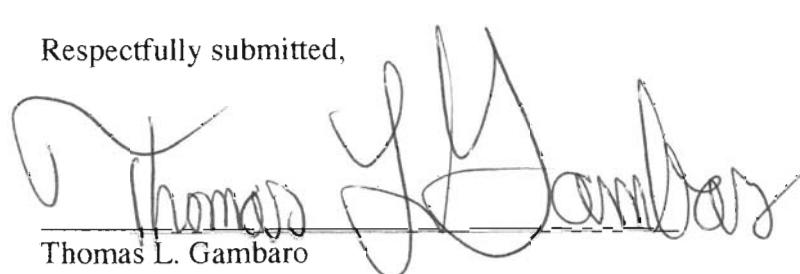
**JURY DEMAND**

B. The Defendant THOMAS L. GAMBARO, US Patent No. 5,332,322 and U.S. Patent Design 405,071 demands a trial by jury.

Respectfully submitted,

August 17, 2010

By:

  
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US00D405071.S

**United States Patent** [19]  
**Gambaro**

[11] **Patent Number:** Des. 405,071  
[45] **Date of Patent:** \*\*Feb. 2, 1999

[54] **CURSOR CONTROL—DATA ENTRY DEVICE**

[76] Inventor: Thomas L. Gambaro, P.O. Box 14741, Portland, Oreg. 97214

[12] Term: 14 Years

[21] Appl. No.: 77,995

[22] Filed: Oct. 17, 1997

[51] LOC (6) Cl. 14-02

[52] U.S. Cl. D14/114; D14/100; D14/116

[58] **Field of Search** D14/100, 105, D14/106, 115; D18/7, 12; 178/18, 19; 235/145 A, 145 R; 341/22, 23; 345/168, 161, 169, 172; 364/708.1; 400/489

[56] **References Cited**

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Harris Corporation, "Model TS-22", *Telephony*, p. 97, May 11, 1987.

"Telecommunication" article from technical journal, publication and date unknown.  
British printer, Sep. 1977.

*Primary Examiner*—Freda Nunn  
*Attorney, Agent, or Firm*—Kolisch, Hartwell, Dickinson, McCormack & Heuser

[57] **CLAIM**

The ornamental design for a cursor control-data entry device, as shown and described.

**DESCRIPTION**

FIG. 1 is an isometric view of a cursor control-data entry device constructed in accordance with a first embodiment of the invention;

FIG. 2 is a top plan view of the cursor control-data entry device of FIG. 1;

FIG. 3 is a right-side view of the cursor control-data entry device of FIG. 1, the left-side being a mirror image thereof;

FIG. 4 is a front view of the cursor control-data entry device of FIG. 1;

FIG. 5 is a rear view of the cursor control-data entry device of FIG. 1; and

FIG. 6 is a bottom view of the cursor control-data entry device of FIG. 1;

FIG. 7 is an isometric view of a cursor control-data entry device constructed in accordance with a second embodiment of the invention;

FIG. 8 is a top plan view of the cursor control-data entry device of FIG. 7;

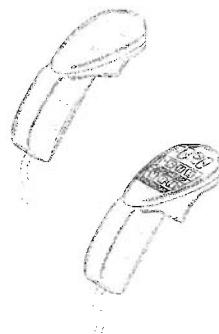
FIG. 9 is a right-side view of the cursor control-data entry device of FIG. 7, the left-side view being a mirror image thereof;

FIG. 10 is a front view of the cursor control-data entry device of FIG. 7;

FIG. 11 is a rear view of the cursor control-data entry device of FIG. 7; and,

FIG. 12 is a bottom view of the cursor control-data entry device of FIG. 7.

1 Claim, 3 Drawing Sheets



U.S. Patent

Feb. 2, 1999

Sheet 1 of 3

Des. 405,071

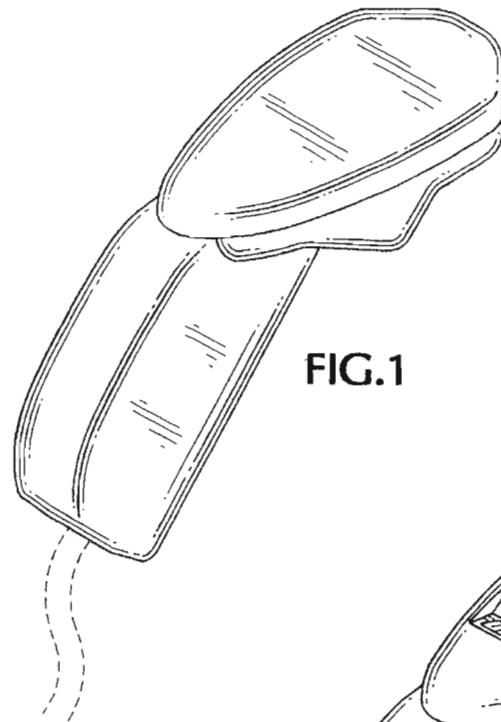


FIG.1

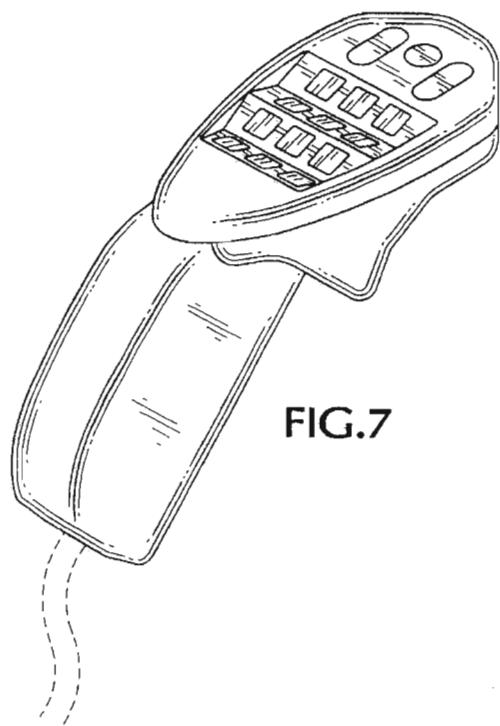


FIG.7

U.S. Patent

Feb. 2, 1999

Sheet 2 of 3

Des. 405,071

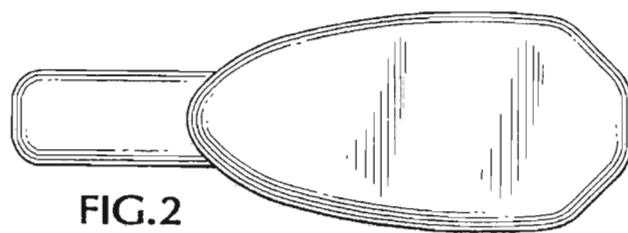


FIG.2

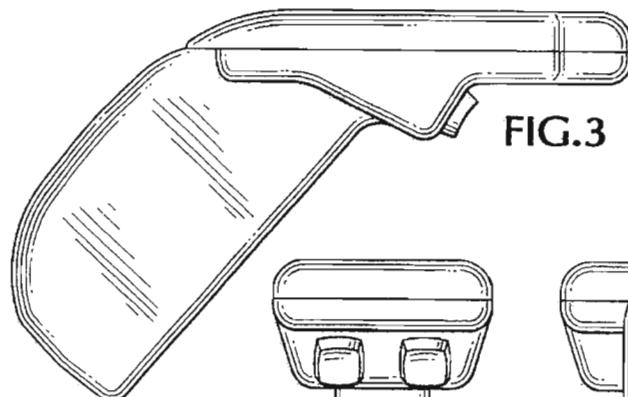


FIG.3

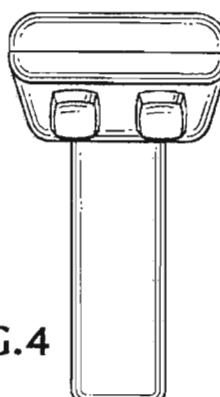


FIG.4

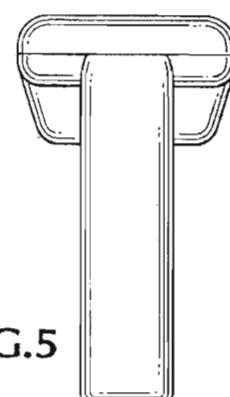


FIG.5

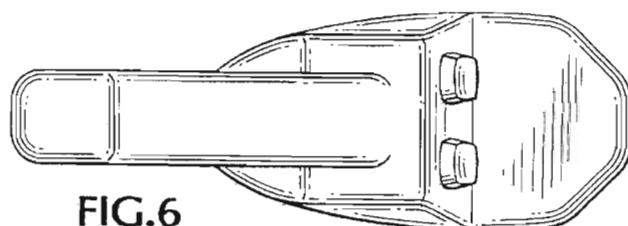


FIG.6

U.S. Patent

Feb. 2, 1999

Sheet 3 of 3

Des. 405,071

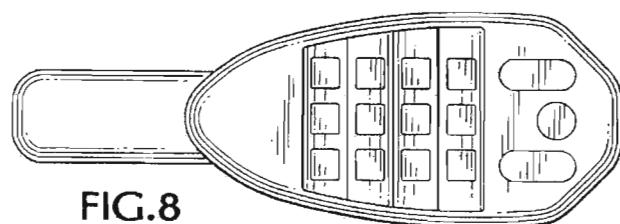


FIG.8

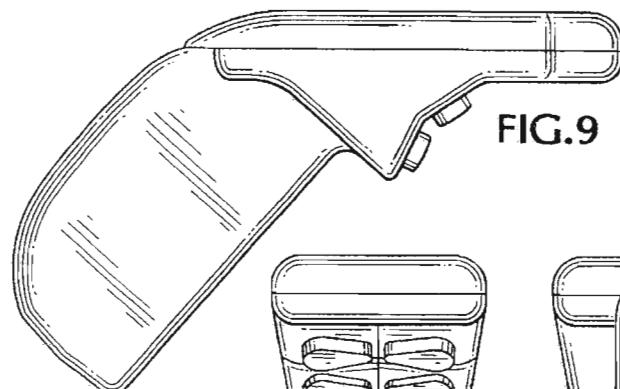


FIG.9

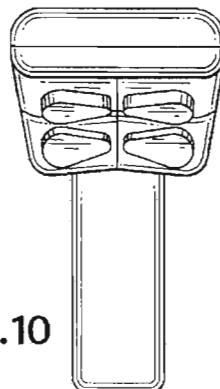


FIG.10

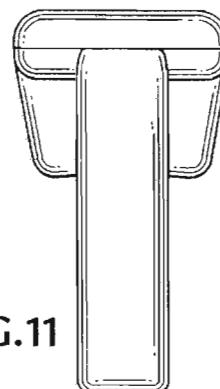


FIG.11

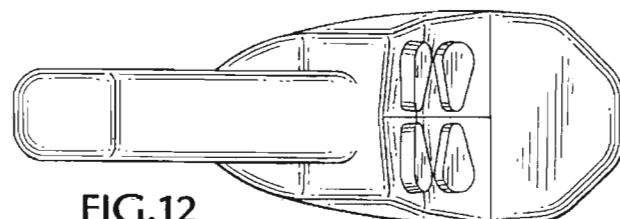
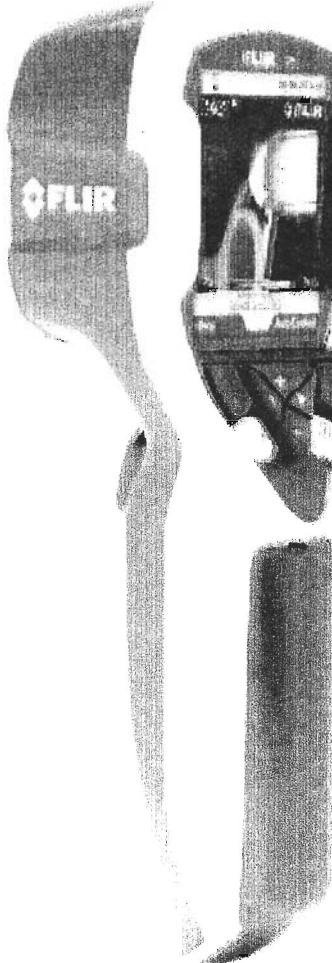


FIG.12

<p><b>1. A hand-held device for entering information into an electronic system via a keyboard, the device comprising:</b></p> <p>“Hand-held” means a device capable of being gripped by the four fingers and palm of a human hand to use the device for some intended purpose.</p> <p>“Device” means a useful object or mechanical invention or contrivance for some purpose.</p> <p>“Entering” means to put into or insert something into another thing or place.</p> <p>“Information” means any data that can be stored in or retrieved from a computer and any body of data on the theory of computer science, e.g. any binary code that can be entered into an electronic system.</p> <p>“Computer” means a person who computes or a device used for computing or specifically an electronic machine, which by means of stored instructions and information, performs rapid, often complex calculations or compiles, correlates and selects data.</p>	<p>The FLIR i5 and FLIR i7 Product in physical form shown in Image One through Ten contains components of <b>Claim 1 of U.S. Patent No. 5,332,322</b> titled <b>ERGONOMIC THUMB-ACTUABLE KEYBOARD FOR A HAND-GRIPPABLE DEVICE</b> that issued July 26, 1994. The inventor is <b>Thomas L. Gambaro</b>.</p> <p><b>FIG.7</b></p>	 <p><b>FLIR i5 and FLIR i7 product Image One</b></p>
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**1. A hand-held device for entering information into an electronic system via a keyboard, the device comprising:**

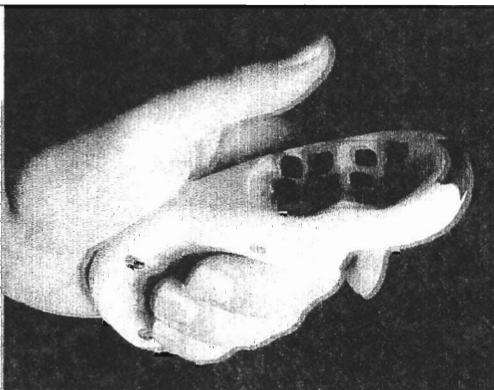
“Electronic” means a system operating as a result of the action of electrons or one or more devices dependent on such action to function.

“System” means the body considered as a functioning organism or a method or plan of classification or arrangement or means. A related series of natural objects or elements like a set or arrangement of things so related or connected as to form a unity or organic whole.

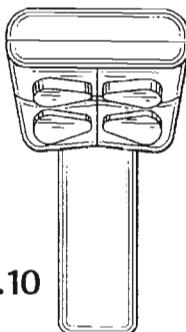
“Via” means by way of.

“Keyboard” is a data entry device for selecting individual switch keys assigned to input binary code symbols or other qualitative or quantitative values into an electronic system.

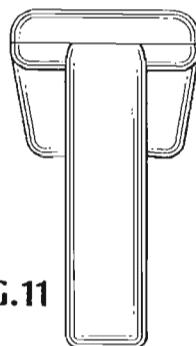
“Comprising” means the composition or makeup of an object.



**FLIR i5 and FLIR i7 Image Two**



**FIG.10**



**FIG.11**

**1 a.) a housing having a grippable portion which permits the device to be held in one hand with the thumb free to move at least temporarily to a predetermined key-actuation position while the device is held,**

“Housing” means any cover for something or any place where something is thought of as being contained and generally protected.

“Grippable-portion” is defined as an area of a device capable of being manipulated by the fingers of a human hand grasping the device.

“Thumb-free” is defined as a human hand position in relation to a device in which the thumb can move freely or unencumbered within a zone of motion defined by the dexterity of the hand.

“Predetermined” means determined, decided, or decreed beforehand. *A priori* determination.

“Key-actuation” is the action of providing mechanical force, e.g., to a switch, typically as a means to input data into an electronic system.

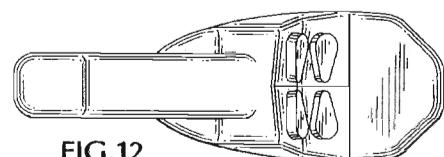
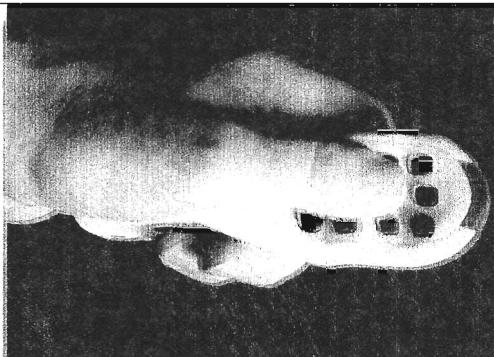


FIG.12

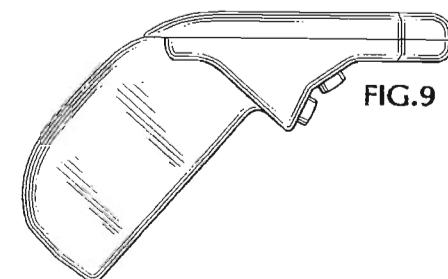


FIG.9

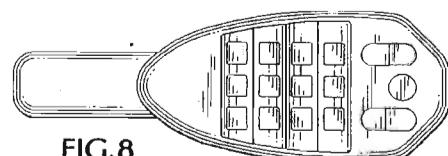
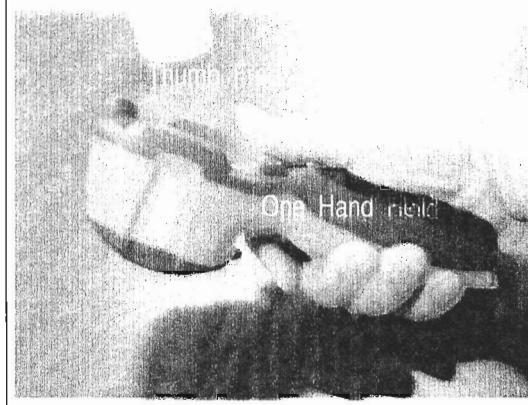
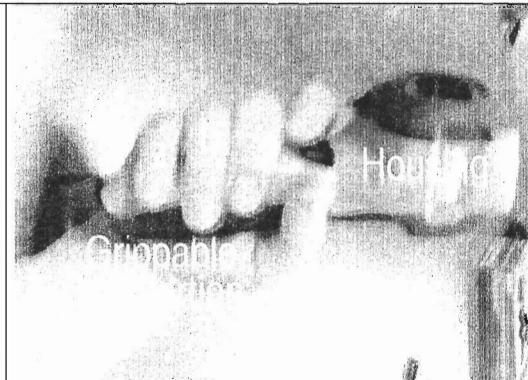
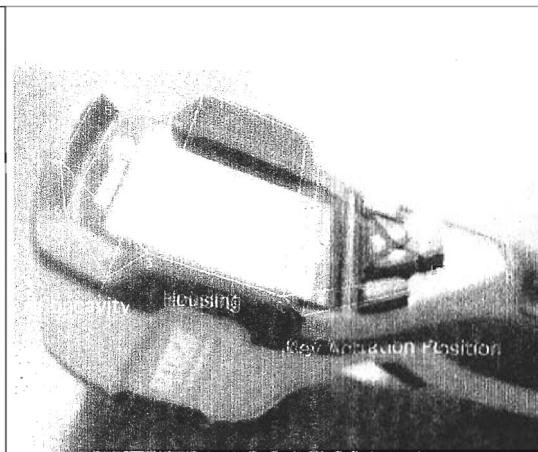
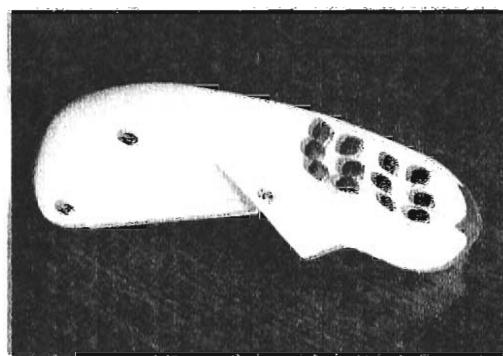


FIG.8

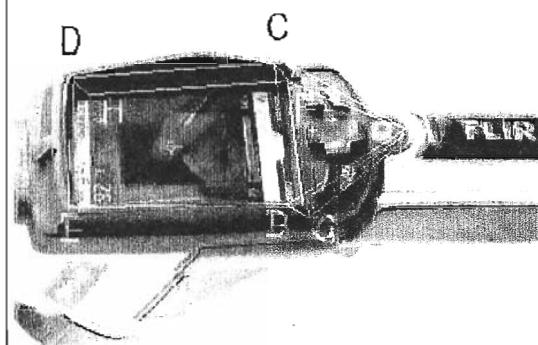


1 b.) a concavity in said housing at said key-actuation position, and

“Concavity” means a hollowed or indented region extending along one or two axes.



FLIR i5 and i7 Product Image Six (a)



FLIR b-series Product Image Six (b)

1 c.) a thumb-associable cluster of keys forming a keyboard within said concavity,

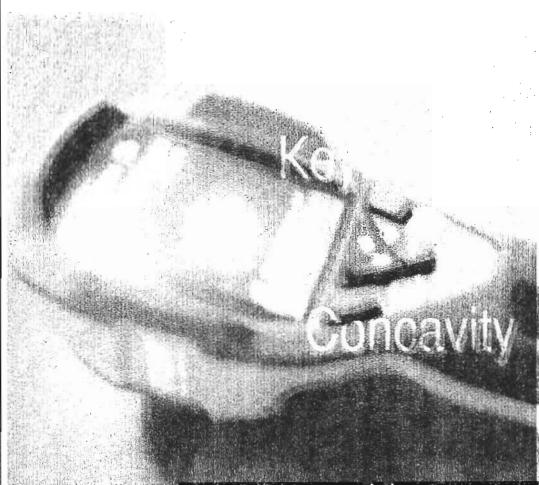
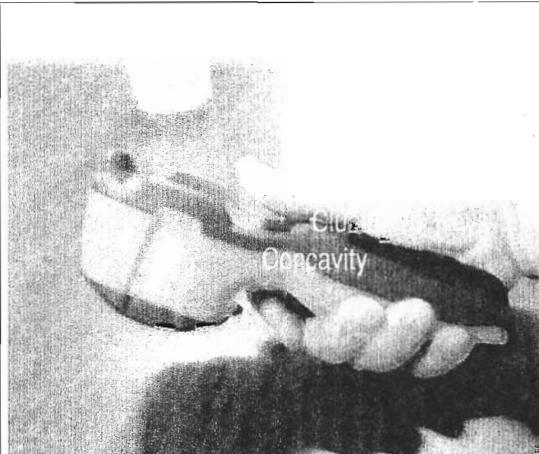
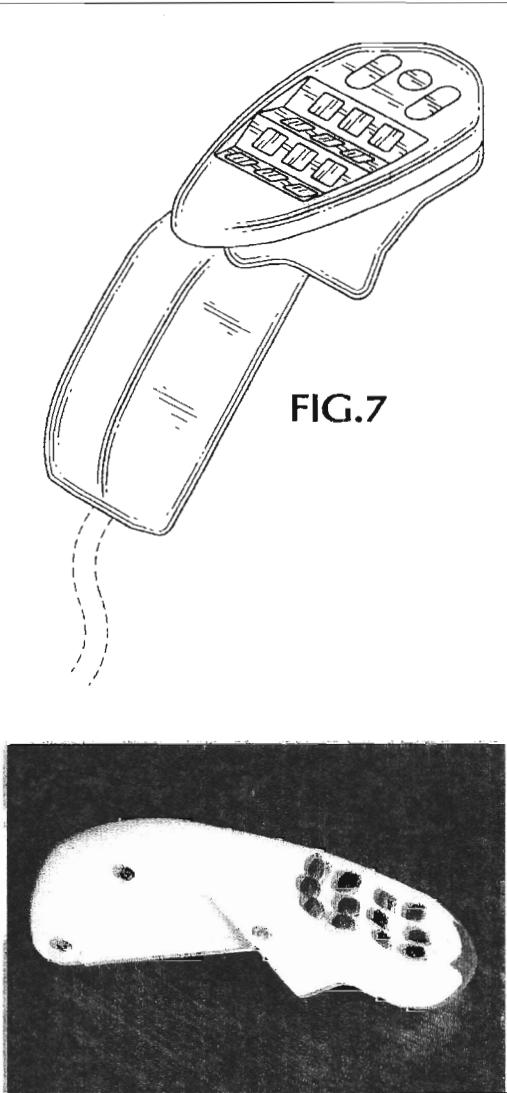
“Thumb-associable” refers to anything capable of being associated with the human thumb in useful combination.

“Cluster” means a number of things of the same sort gathered together or growing together as a bunch or a number of persons, animals or things grouped together.

“Keys” means a device for opening or closing an electric circuit that is a component of a keyboard.

“Keyboard” is a data entry device for selecting individual switch keys assigned to input binary code symbols or other qualitative or quantitative values into an electronic system.

“Concavity” means a hollowed or indented region extending along one or two axes.



**1 d.) each of the plurality of keys in said cluster being selectively actuatable via mixed lateral, and slight endo, translation of a thumb within said concavity,**

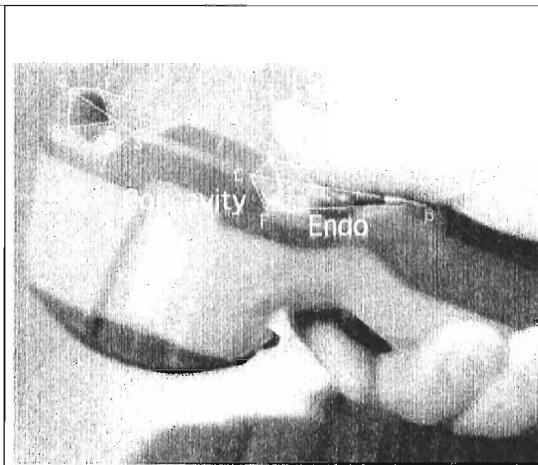
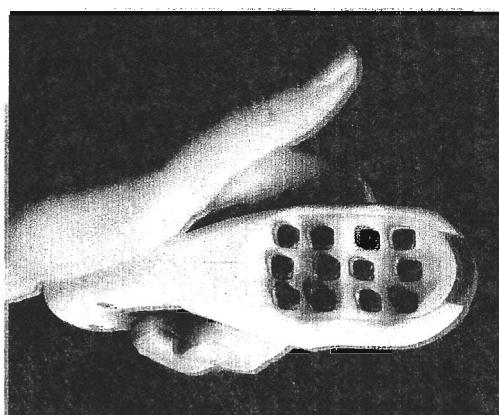
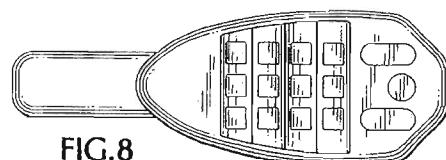
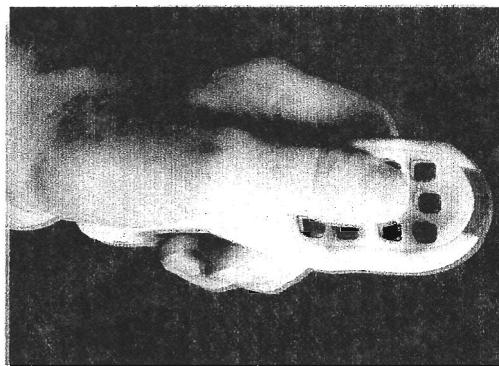
“Plurality” means more than one.

“Keys” means a device for opening or closing an electric circuit that is a component of a keyboard.

“Cluster” means a number of things of the same sort gathered together or growing together as a bunch or a number of persons, animals or things grouped together.

“Lateral” is defined as movement of a human finger or thumb from one side within the limits of the user’s dexterity that, when combined with an up and down movement within the cone of motion, selectively activates a key for data entry.

“Endo” means generally within a defined area or along the long axis of an elongate object or thing.



FLIR i5 & i7 Product Image Nine (a)

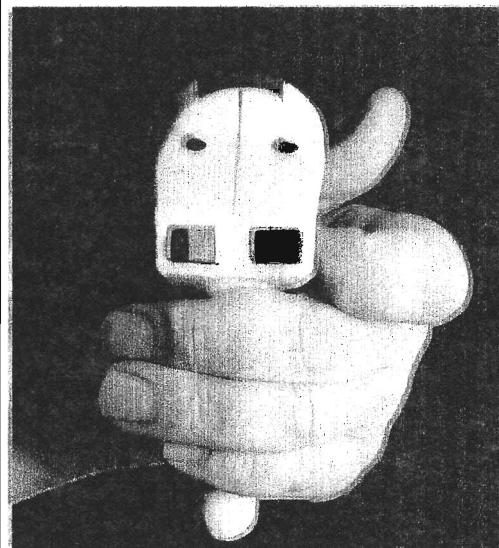


FLIR i5 & i7 Product Image Nine (b)

“Translation” means to change from one place or position or condition to another or to transfer into another medium or form.

“Thumb” means the short, thick digit having three segments of the human hand that is nearest the wrist and is opposable to the other fingers.

“Concavity” means a hollowed or indented region extending along one or two axes.



1 e.) whereby information is entered into an electronic system.

“Information” means any data that can be stored in or retrieved from a computer and any body of data on the theory of computer science, e.g. any binary code that can be entered into an electronic system.

“Entered” means the past tense to put into or insert something into another thing or place.

“Electronic” means a system operating as a result of the action of electrons or one or more devices dependent on such action to function.

“System” means the body considered as a functioning organism or a method or plan of classification or arrangement or means. A related series of natural objects or elements like a set or arrangement of things so related or connected as to form a unity or organic whole.

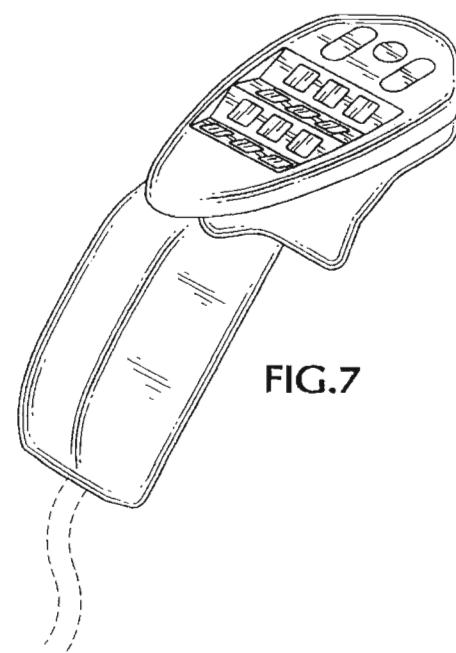


FIG.7

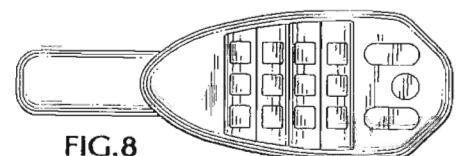
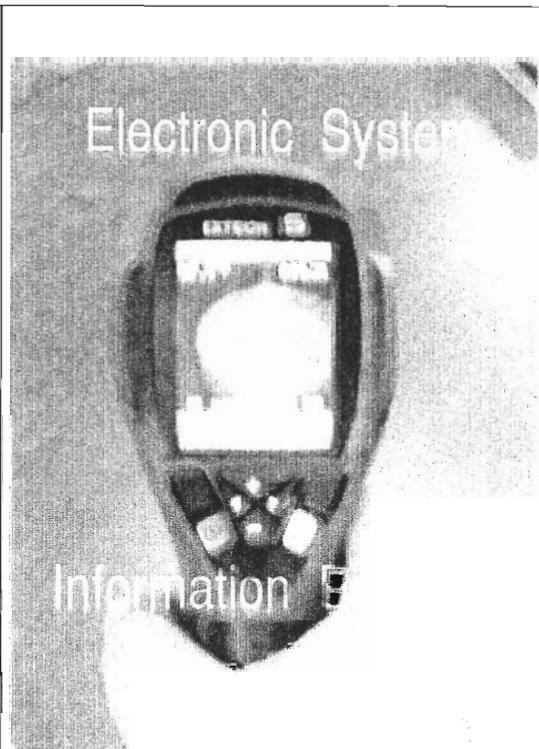


FIG.8



FLIR i5 & i7 Product Image Ten

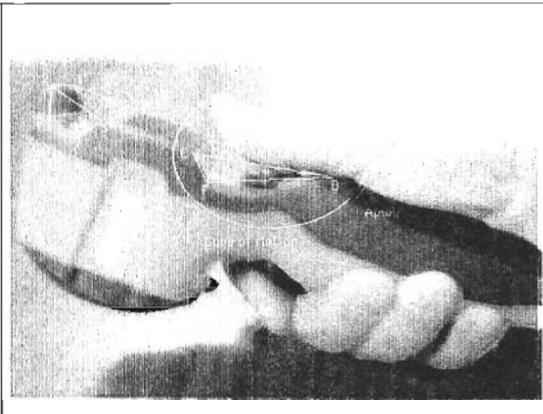
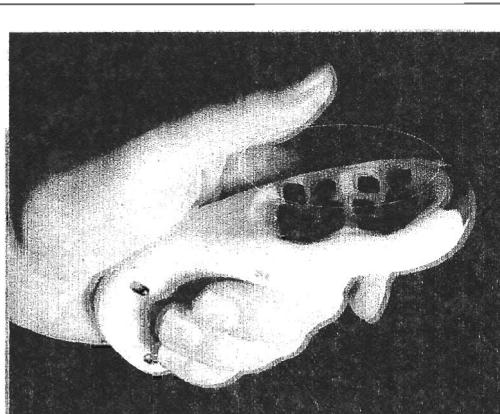
**2.) A device as in claim 1 in which said keys are located in said concavity within a cone of motion of a user's thumb, when the thumb is positioned in said concavity, whose apex resides adjacent to the base of the thumb.**

"Keys" means a device for opening or closing an electric circuit that is a component of a keyboard.

"Cluster" means a number of things of the same sort gathered together or growing together as a bunch or a number of persons, animals or things grouped together.

"Concavity" means a hollowed or indented region extending along one or two axes.

"Cone" means any object or mass or region shaped like a cone that is solid or an open area defined by a circle for its base and a curved surface tapering evenly to an apex so that any point of this surface is in a straight line between the circumference of the base and the apex.



**FLIR i5 & i7 Product Image Eleven (a)**

"Cone of Motion" refers to the area that can be reached by the Distal Thumb Tip and Distal Thumb Joint defined by the dexterity of the human hand to accomplish ergonomic data entry using the '477 and/or '322 utility methods.

"Distal Thumb Tip" is defined as the outer surface portion of the human hand that corresponds with the bone anatomy point at the tip of the first phalange.

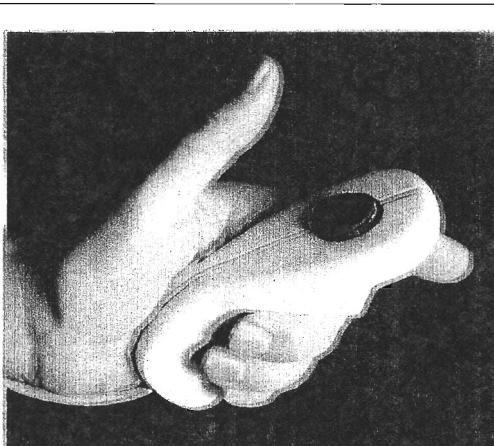
"Distal Thumb Joint" is defined as the outer surface portion of the human hand that corresponds with the bone anatomy at the base of the first phalange and the tip of the second phalange.

"Phalange"

"Thumb" means the short, thick digit having three segments of the human hand that is nearest the wrist and is opposable to the other fingers.

"Concavity" means a hollowed or indented region extending along one or two axes.

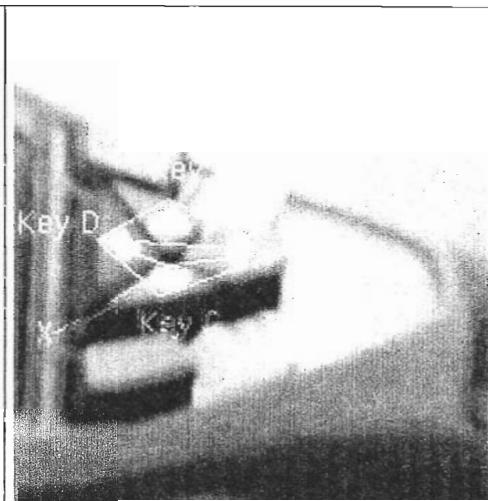
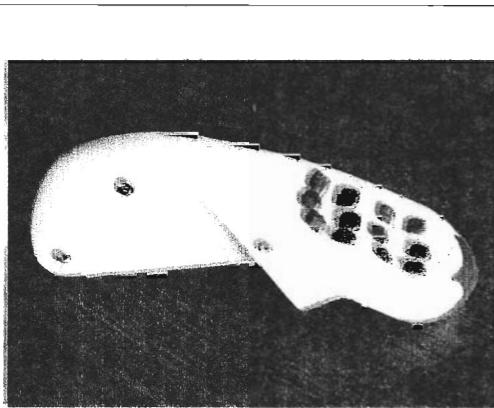
"Apex" means the tip or the highest point that is the peak or vertex. *See also* "Cone"



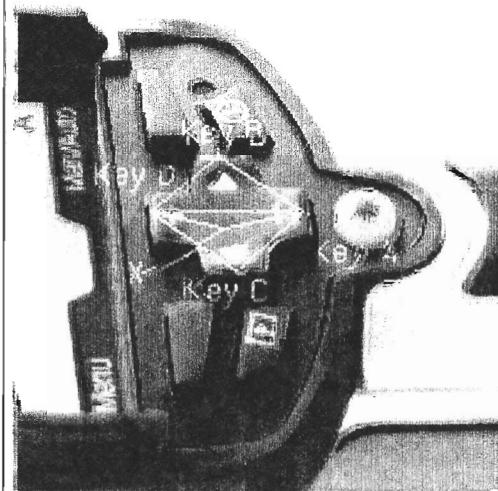
**3 a.) A device as in claim 1 wherein said cluster of keys includes individual keys oriented in planes which are angularly offset from one another,**

“Cluster” means a number of things of the same sort gathered together or growing together as a bunch or a number of persons, animals or things grouped together.

“Keys” means a device for opening or closing an electric circuit that is a component of a keyboard.



FLIR i5 & i7 Product Image Twelve (a)



FLIR b-series Product Image Twelve (b)

**3 b.) to permit selective actuation by said mixed lateral, and slight endo, translation of a thumb positioned in said concavity.**

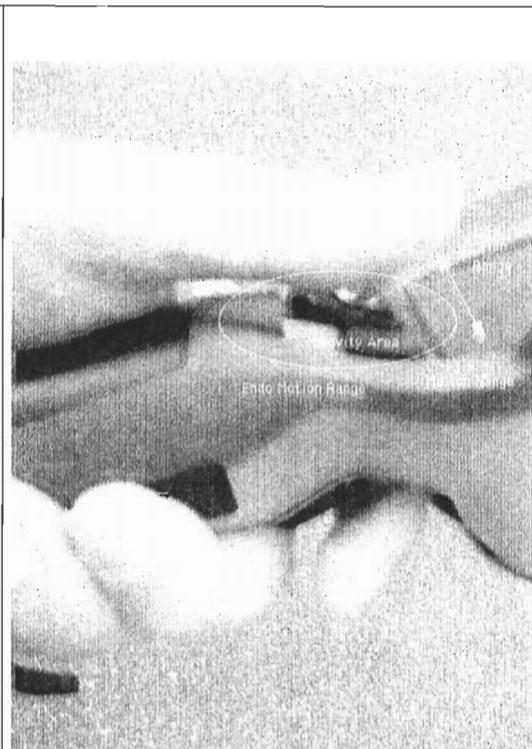
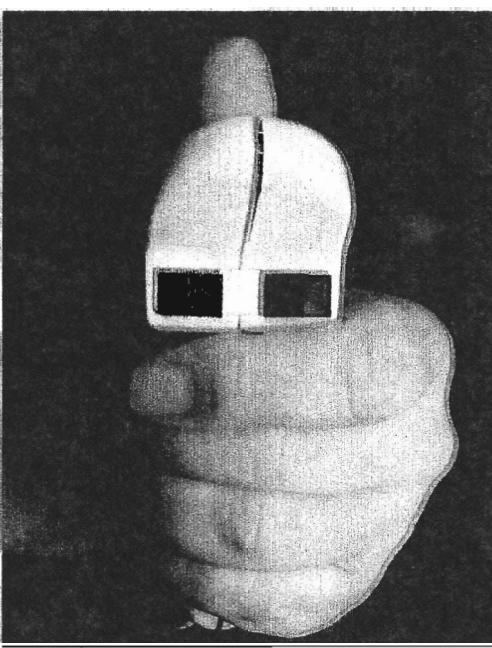
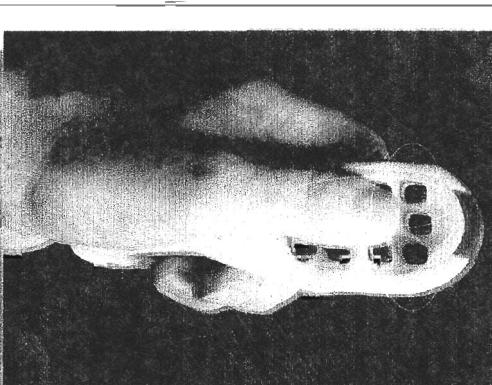
“Lateral” is defined as movement of a human finger or thumb from one side within the limits of the user’s dexterity that, when combined with an up and down movement within the cone of motion, selectively activates a key for data entry.

“Endo” means generally within a defined area or along the long axis of an elongate object or thing.

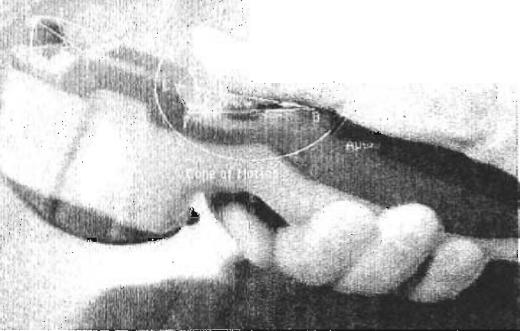
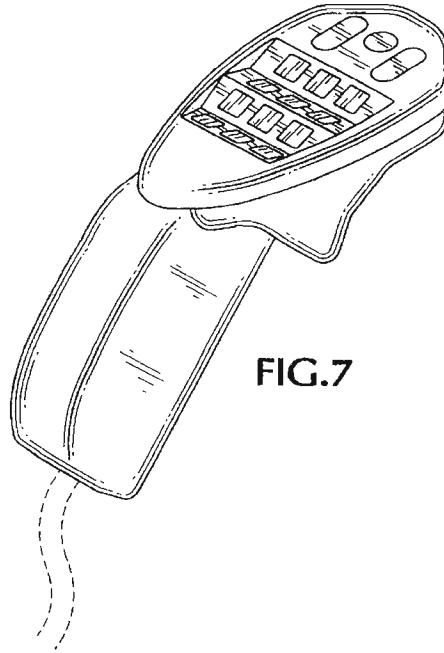
“Translation” means to change from one place or position or condition to another or to transfer into another medium or form.

“Thumb” means the short, thick digit having three segments of the human hand that is nearest the wrist and is opposable to the other fingers.

“Concavity” means a hollowed or indented region extending along one or two axes.



FLIR i5 and i7 Product Image Twelve (c)

<p><b>5. A device as in claim 1 in which said grippable portion is a handle which can be gripped between the fingers and thenar eminence of a user's hand, whereby when the device is gripped thus, the user's thumb is selectively movable into said concavity without the user losing a grip on the device.</b></p> <p>"Thenar Eminence" means the prominence on the palm at the base of the thumb.</p>	<p>The FLIR product shown in on the right contains the elements, structurally or equivalently of each claim of the '322 patent and '071 patent that are present in the accused device and specified providing a further illustration of the combined "mixed lateral, and slight endo" movements of the user's thumb originating from the "Apex" of the user's thumb.</p> <p>The pattern of "translation of a thumb positioned in said concavity" is indicated by the movements from A to B for "slight endo" and C to D for the "mixed lateral" capability demonstrating the utility that "permits selective actuation".</p>	 
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## CERTIFICATE OF SERVICE

The undersigned hereby certifies that on August 17, 2010, a true copy of the foregoing **DEFENDANT AMENDED ANSWERS AND COUNTERCLAIMS** was served to the following counsel by hand delivery, electronic filing via email with electronic signature.

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Respectfully submitted,

August 17, 2010

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